

INTERNATIONAL SEARCH REPORT

 International Application No
 PCT/FR2004/002509

 A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 C22C29/12 B22F3/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 B22F C22C C25C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 871 438 A (STEVEN C. MARSCHMANN) 3 October 1989 (1989-10-03)	1-11, 18-29, 35,41-46
Y	column 4, line 6 - column 5, line 54	31-34
Y	US 4 473 483 A (IMAMURA ET AL) 25 September 1984 (1984-09-25) column 8, line 17 - line 29	31-34
X	US 4 713 300 A (HAROLD G. SOWMAN) 15 December 1987 (1987-12-15) column 5, line 34 - column 6, line 34 -/-	1-4, 11-18, 30,34, 36-40

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

24 May 2005

Date of mailing of the international search report

01/06/2005

Name and mailing address of the ISA

 European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Desbois, V

INTERNATIONAL SEARCH REPORT

International Application No

PCT/FR2004/002509

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 529 494 A (JOO' ET AL) 16 July 1985 (1985-07-16) column 5, line 18 - line 21 column 5, line 27 - line 29 -----	46
A	WO 01/31089 A (ALCOA INC.) 3 May 2001 (2001-05-03) the whole document -----	1-38
A	US 4 089 681 A (GUEUSSIER ET AL) 16 May 1978 (1978-05-16) column 2, line 16 - line 68 column 4, line 7 - line 14 -----	22-29
A	EP 1 268 105 A (ENDRICH, MANFRED; KOCHANKEK, WOLFGANG) 2 January 2003 (2003-01-02) paragraph '0029! -----	24,25, 28,29

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/FR2004/002509

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4871438	A	03-10-1989	AU 615017 B2	19-09-1991
			AU 2791789 A	01-06-1989
			EP 0396586 A1	14-11-1990
			WO 8904383 A1	18-05-1989
			ZA 8807809 A	27-06-1990
US 4473483	A	25-09-1984	JP 1140038 C	24-03-1983
			JP 55085426 A	27-06-1980
			JP 57019055 B	20-04-1982
			CA 1123591 A1	18-05-1982
			DE 2966901 D1	17-05-1984
			DK 547679 A ,B,	22-06-1980
			EP 0013009 A1	09-07-1980
US 4713300	A	15-12-1987	AU 578550 B2	27-10-1988
			AU 6586486 A	18-06-1987
			CA 1284022 C	14-05-1991
			DE 3685639 D1	16-07-1992
			DE 3685639 T2	04-02-1993
			EP 0226438 A2	24-06-1987
			JP 62222042 A	30-09-1987
			KR 9410098 B1	21-10-1994
			SG 126092 G	19-02-1993
			US 4743511 A	10-05-1988
US 4529494	A	16-07-1985	NONE	
WO 0131089	A	03-05-2001	US 6423195 B1	23-07-2002
			AT 284459 T	15-12-2004
			AU 1244801 A	08-05-2001
			CA 2388908 A1	03-05-2001
			DE 60016624 D1	13-01-2005
			EP 1230437 A1	14-08-2002
			WO 0131089 A1	03-05-2001
			US 2003121775 A1	03-07-2003
			US 6423204 B1	23-07-2002
			US 2002056650 A1	16-05-2002
US 4089681	A	16-05-1978	FR 2366364 A1	28-04-1978
			BR 7700639 A	18-10-1977
			CA 1103932 A1	30-06-1981
			DE 2704290 A1	04-08-1977
			ES 455576 A1	01-05-1978
			GB 1577020 A	15-10-1980
			IT 1078012 B	08-05-1985
			JP 52095512 A	11-08-1977
			MX 143510 A	21-05-1981
			SE 7701215 A	04-08-1977
			ZA 7700584 A	26-04-1978
EP 1268105	A	02-01-2003	DE 10014403 A1	27-09-2001
			AT 267655 T	15-06-2004
			AU 5621201 A	08-10-2001
			CA 2424733 A1	01-04-2003
			DE 50102410 D1	01-07-2004
			DK 1268105 T3	04-10-2004
			WO 0172456 A1	04-10-2001
			EP 1268105 A1	02-01-2003

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/FR2004/002509

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1268105	A	ES 2222991 T3	16-02-2005
		JP 2003528979 T	30-09-2003
		US 2004067152 A1	08-04-2004
<hr/>			